Career and Technical Education State Standards (Revised 2013)

http://cte.dpi.wi.gov/cte_bitstandards

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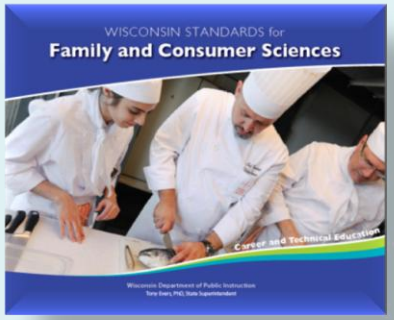
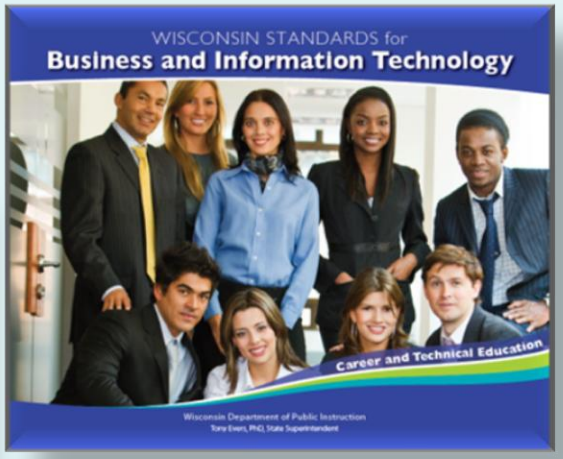




Handouts: see the DPI folder in your registration materials

WISCONSIN DEPARTMENT OF PUBLIC INSTRUCTION

Purpose of the Revised Business & Information Technology Standards

Program leaders will find the Revised Business & Information Technology Standards valuable for making decisions about:

- program **structure and integration**;
- curriculum **redesign**;
- staffing and **staff development**;
- **scheduling** and student grouping;
- **facility organization**;
- **learning spaces** and **materials development**;
- **resource allocation** and **accountability**; and
- **collaborative work** with other units of the school, district, and community.

Agenda 2017

Standards & Instruction

- *What and how should kids learn?*

Assessments and Data Systems

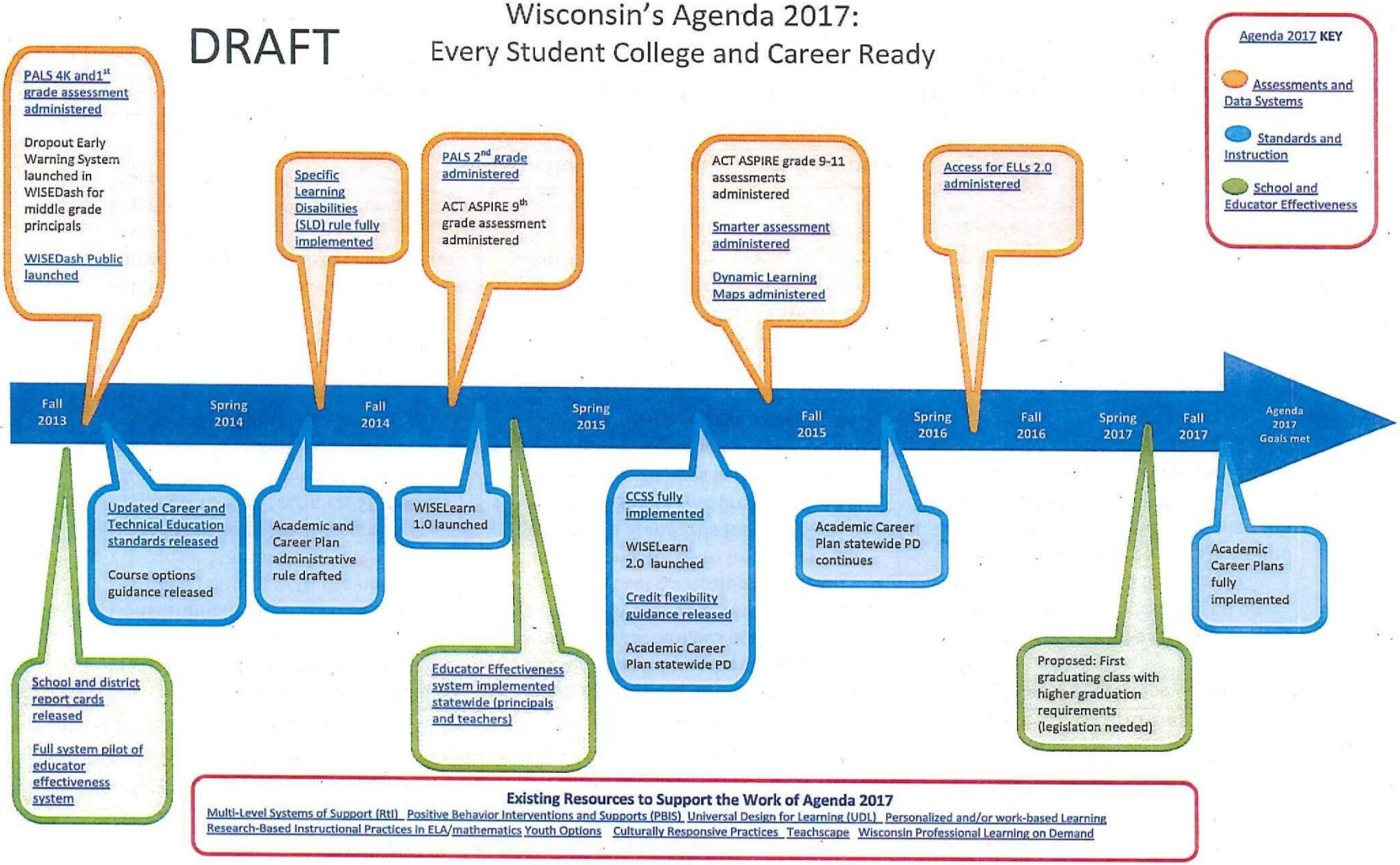
- *How do we know if they learned it?*

School and Educator Effectiveness

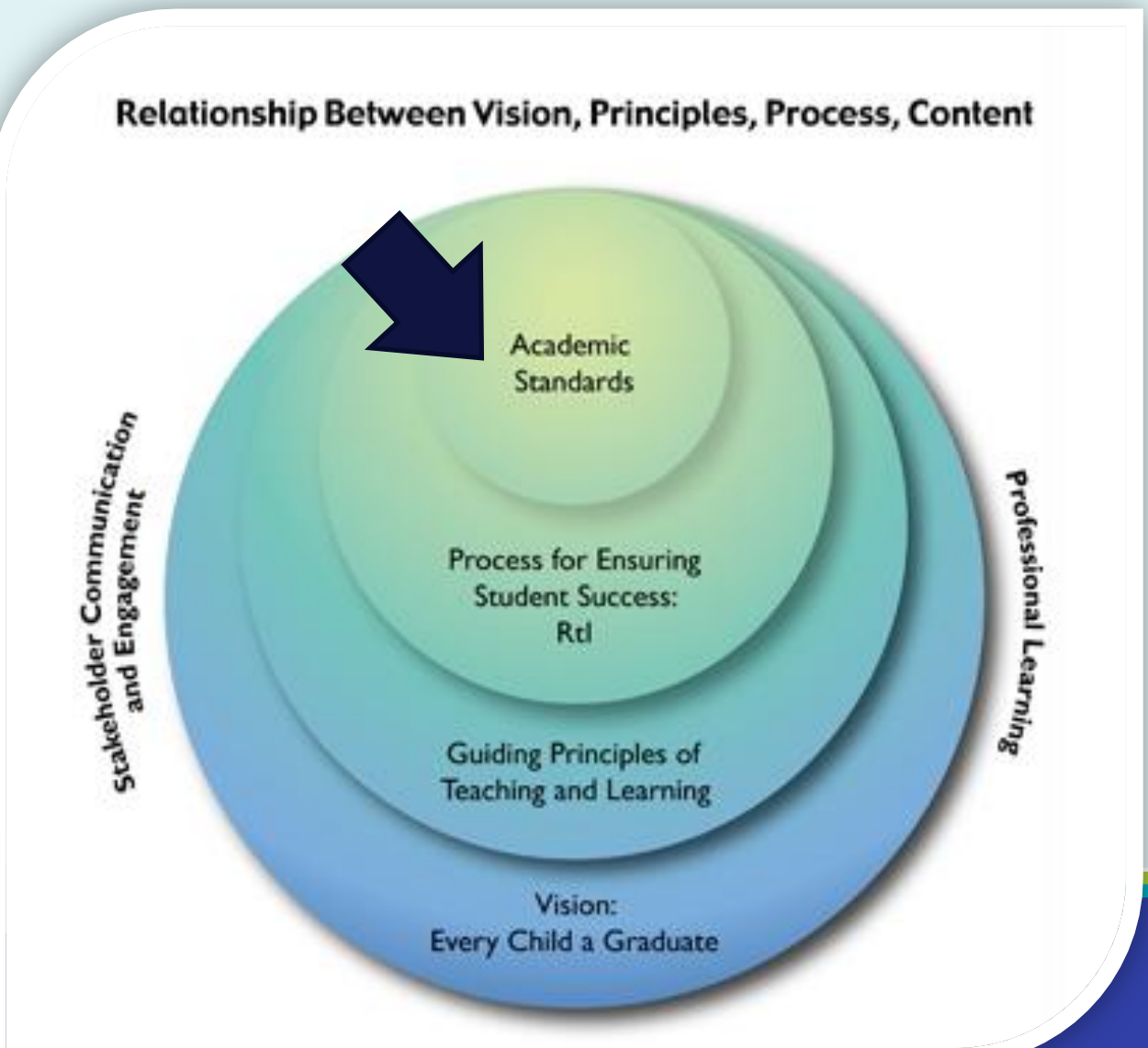
- *How do we ensure that students have highly effective teachers and schools?*

DRAFT

Wisconsin's Agenda 2017:
Every Student College and Career Ready



Wisconsin Career & Technical Education Standards



The Shift

Model Academic Standards to Wisconsin Standards for CTE

Reference pages 10-11

	Old 1998	New Revised 2013
Which students?	ALL	Students taking CTE courses
Specificity & Structure	Broad Grades 4, 8, and 12	Specific By Grade band
How developed?	Focus groups to develop first set of state standards	Practitioners using multiple resources
Connection to other standards	Limited connection	Purposeful in connecting to multiple standards & initiatives

Wisconsin's Approach to Academic Standards

- Provides a vision for student success and guiding principles for teaching and learning.

- Improves Career and Technical Education for students and for communities.

- Assists Wisconsin educators and stakeholders in understanding and implementing the Career & Technical Education content standards.

Who Was Involved?

Acknowledgements on pages 6-8

Business & Information Technology

- Development began with a variety of national standards and related documents
  - See the full list on page 11

CTE™
Learning that works for Wisconsin

What is Contemporary CTE?

- National Vision of CTE
- CTE in Wisconsin
- Quality Components of CTE in Wisconsin

Wisconsin Department of Public Instruction

National Vision of CTE

Career and Technical Education is:

- critical to ensuring that the United States leads in global competitiveness;
- actively partnering with employers to design and provide high-quality, dynamic programs;
- preparing students to succeed in further education and careers;
- delivered through comprehensive programs of study aligned to The National Career Clusters framework; and
- a results-driven system that demonstrates a positive return on investment.

http://www.careertech.org/career-technical-education/cte-vision.html

Wisconsin Vision of CTE

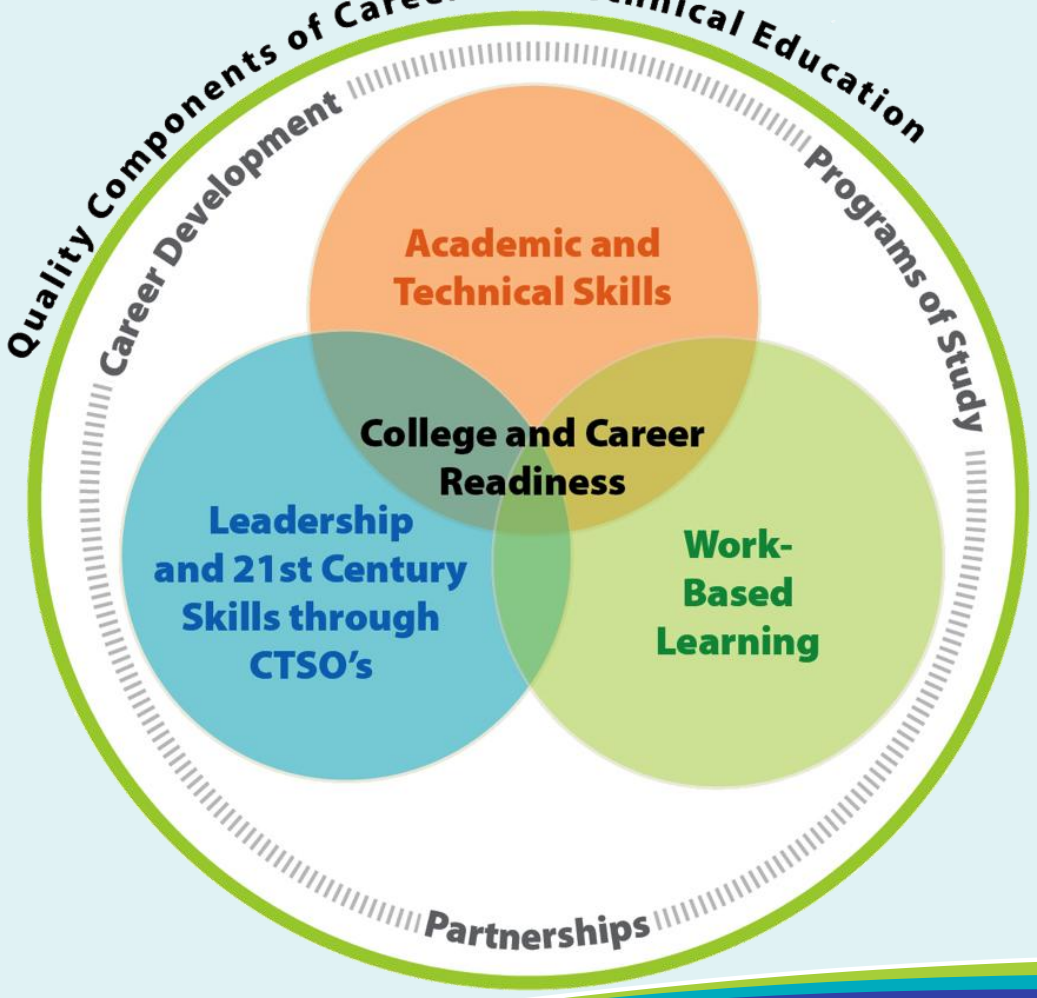
- CTE is both a collection of educational programs or content areas as well as a system of preparing students to be career and college ready.

- Contemporary CTE programs are delivered primarily through six specific content areas.

Wisconsin's Approach to CTE

- **What is Contemporary CTE?**
  - Quality Components of CTE
  - Delivering CTE through Career Clusters & Pathways
  - CTE Advocacy Resources
    - Importance of CTE
    - Work-Based Learning
    - CTSO

Quality Components of CTE



CTE™
Learning that works for Wisconsin

The Importance of Business and Information Technology in Wisconsin and Our Communities

Pages 26-27

- **B&IT is relevant and engaging**
- **B&IT is important to the economy**
- **B&IT prepares students for college and careers**
- **B&IT goes beyond the classroom**
- **B&IT is interdisciplinary**
- **B&IT creates students who care**

Wisconsin Department of Public Instruction

Work-Based Learning in Business and Information Technology Programs

Pages 28-29

- **B&IT Work-Based Learning Options**
  - Job Shadowing
  - Service Learning
  - Local Cooperative Education Programs
  - School Based Enterprises
  - Youth Leadership Skills Standards Programs
  - Employability Skills Certificate Programs
  - State Certified Education Skill Standards Program
  - Wisconsin Youth Apprenticeship
- **FBLA recognized as integral to Work-Based Learning**

Career and Technical Student Organizations in Business and Information Technology Programs

Pages 31-32

- **Wisconsin FBLA Mission**
- **Attributes and Values**
- **College and Career Ready**
- **Wisconsin Competitive Events**
- **Leadership Opportunities**
- **Community Service Opportunities**

The Powerful Outcomes of CTE

- ✓ **2/3** of Wisconsin Students take **1** or more CTE course

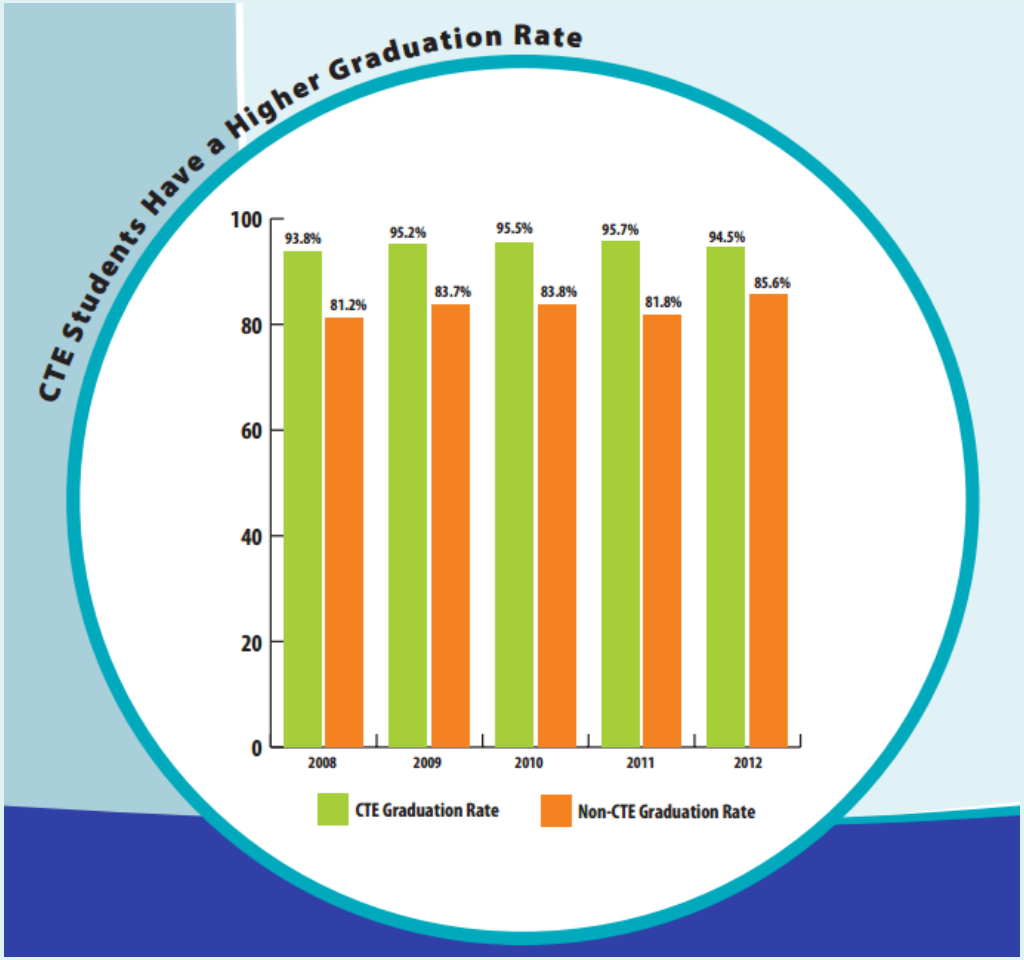
District Participation of Juniors and Seniors in Career & Technical Education

Occupational Area	Male	Female	Total
Agriculture and Natural Resources	8,395	5,641	**14,036**
Business and Information Technology	23,132	20,200	**43,332**
Family and Consumer Science	14,101	20,840	**34,941**
Health Science	2,093	6,584	**8,677**
Marketing	5,676	4,444	**10,120**
Technology and Engineering	29,287	9,404	**38,691**
Multiple Program Areas	24,142	19,774	**44,916**

Source: DPI CTEERS[10]

The Powerful Outcomes of CTE

- ✓ Higher Graduation Rates



The Powerful Outcomes of CTE

- ✓ B&IT prepares students to be College-Ready

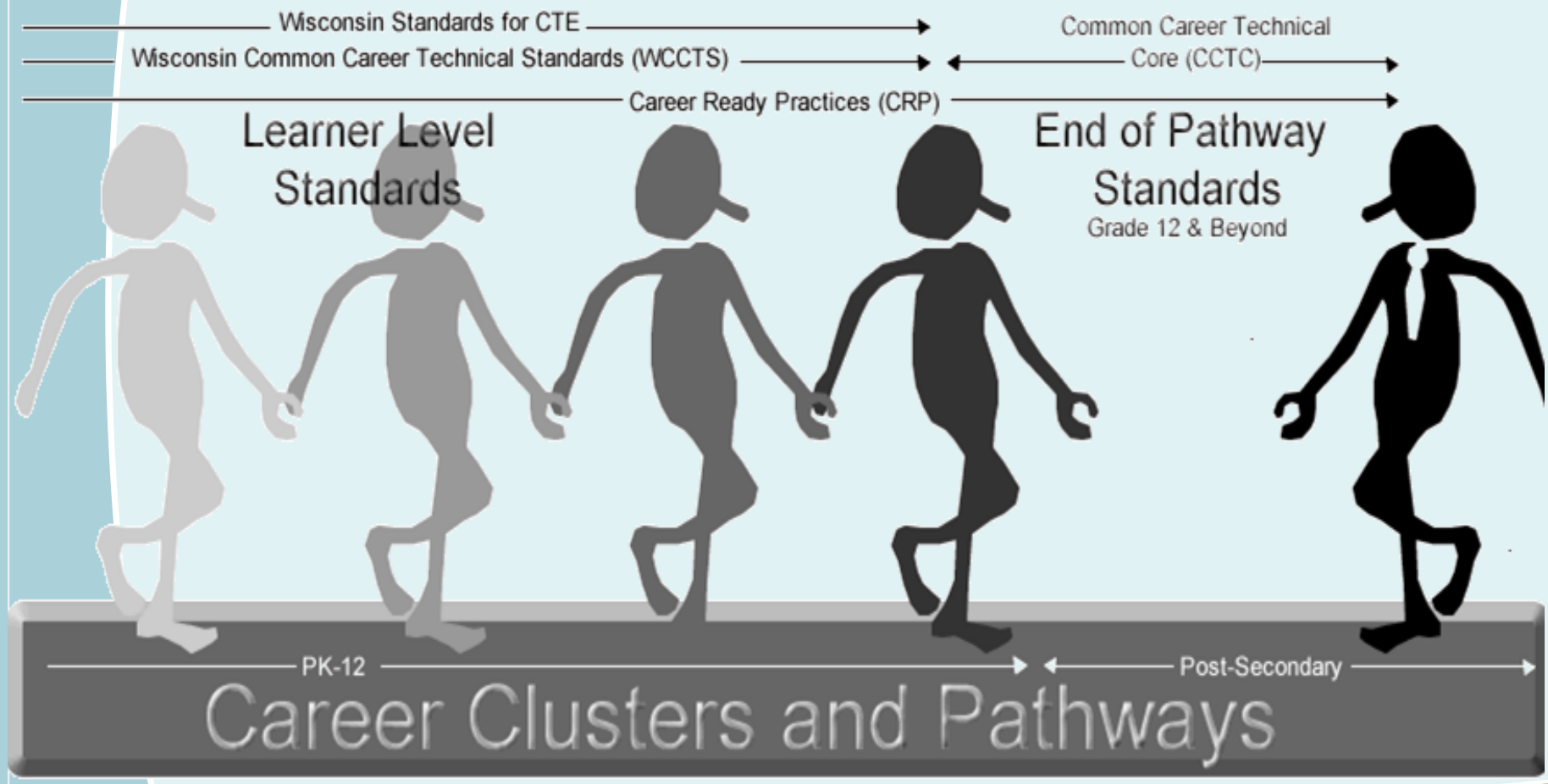
Powerful Outcomes of CTE and AP
http://www.careertech.org/file_download/b0f1a949-41a2-4fbd-ba31-fab04272aaf2

Wisconsin Technical College Articulation Agreements
http://systemattic.wtcsystem.edu/reports/STW/articulation_agreements.htm

Additionally, UW-Oshkosh CAPP & UW-Whitewater PIE

PK-16 Learning Continuum

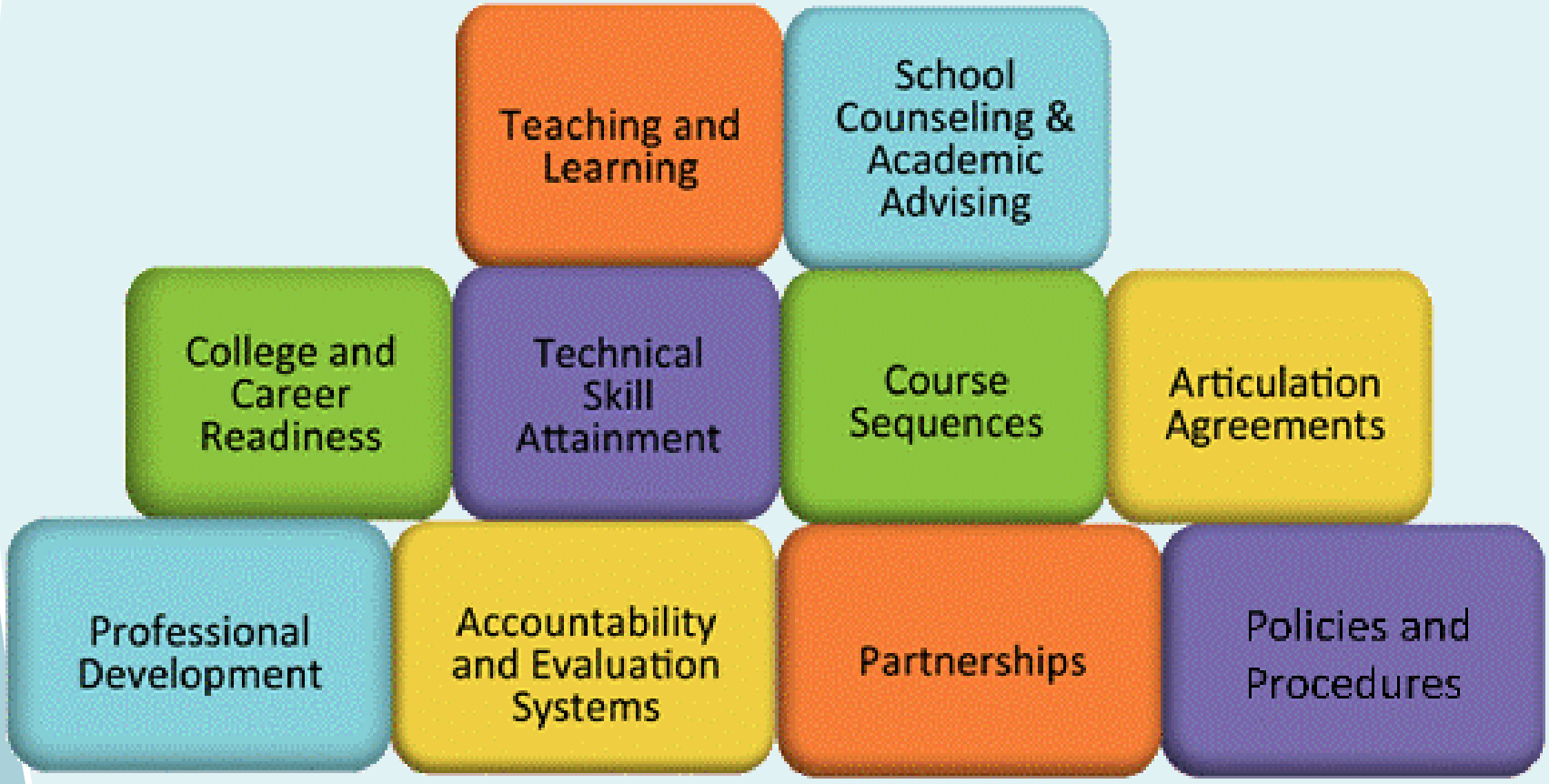
Page 22



Career Clusters Framework

- Links school-based learning with knowledge and skills in workplace.
- Developed by NASDCTEc
- 16 Career Clusters & 79 Career Pathways
- http://cte.dpi.wi.gov/cte_implementcc

Career Clusters
10 Components Framework



Common Career Technical Core (CCTC)

- The Common Career Technical Core (CCTC) is a state-led initiative to establish a set of rigorous, high-quality standards for Career Technical Education (CTE) that states can adopt voluntarily.

- The standards have been informed by state and industry standards and developed by a diverse group of teachers, business and industry experts, administrators and researchers.

- The CCTC includes a set of standards for each of the 16 Career Clusters™ and their corresponding Career Pathways that define what students should know and be able to do after completing instruction in a program of study.

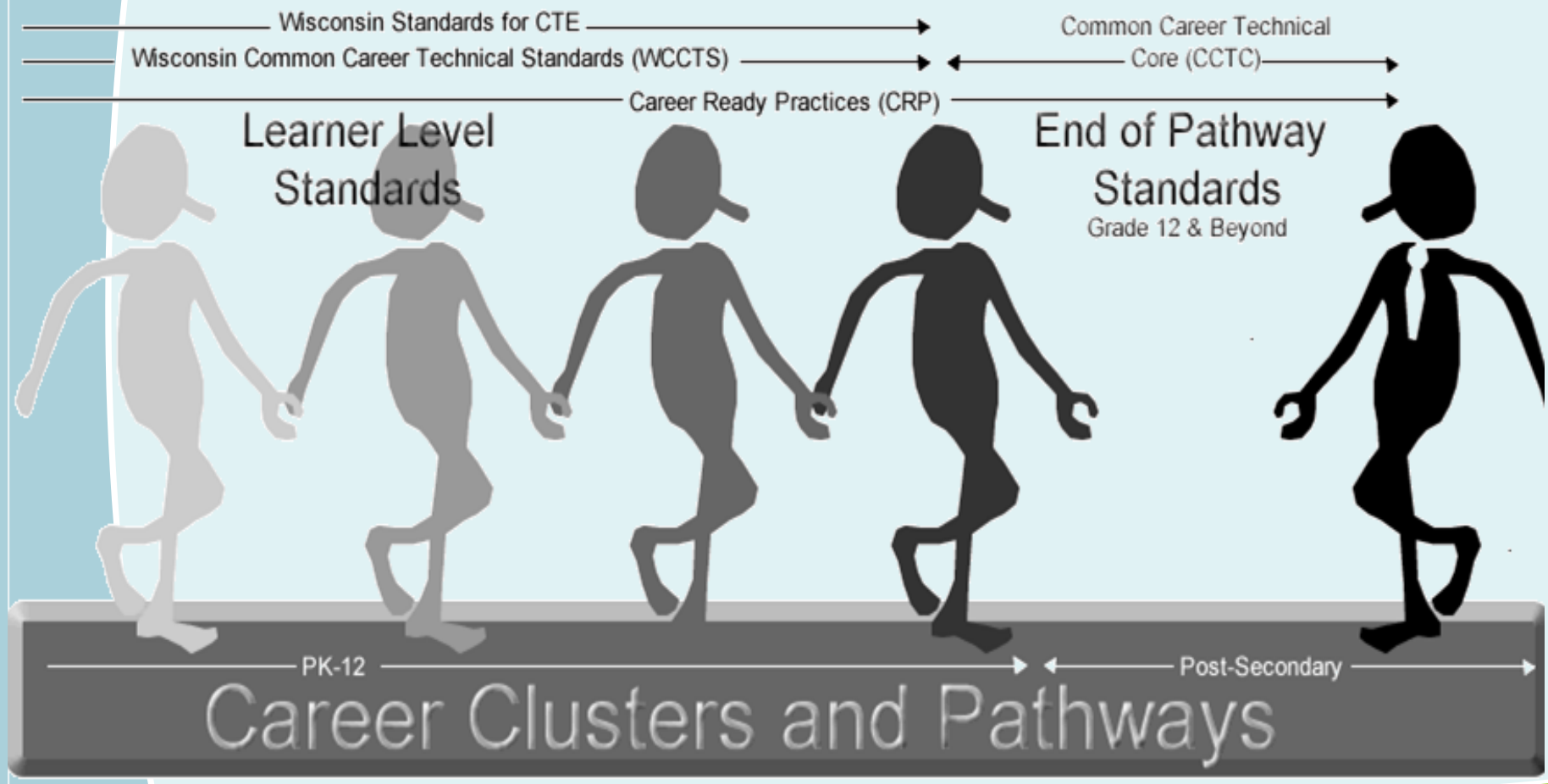
Career Ready Practices (CRP)

Page 23

- The Career Ready Practices (CRP) component of the CCTC provides a framework for the developmental experiences necessary to becoming career ready; experiences that can be “practiced” using many different approaches in a variety of settings.

- A student refines these practices throughout their full continuum of learning: through their journey in school, college, the workforce and when they return to advance their education.

PK-16 Learning Continuum



Wisconsin Standards for CTE

Wisconsin's Common Career Technical Standards (WCCTS)

- Development began with a variety of national standards and related documents
  - Partnership for 21st Century Skills (P21)
  - States' Career Cluster Initiative Essential Knowledge and Skill Statements
  - Career Readiness Partner Council Elements of Career Readiness
  - NASDCTEc Common Career Technical Core
  - Others

Common Career Technical Standards (WCCTS)

- Set of six standards that transcend CTE state-wide and across all CTE content areas
- Provide a strong foundation for students to complete a POS
- Vetted by workgroups from all CTE content areas and various other stakeholder groups

Wisconsin Common Career Technical Standards (WCCTS)

Page 23

6 Wisconsin Common Career Technical Standards*					
Career Development Has a focus on personal and social, academic, career content and employability skills	**Creativity, Critical Thinking, Communication and Collaboration** Has a focus on creativity and innovative problem solving, critical thinking used to formulate and defend judgments, to communicate and collaborate to accomplish tasks and develop solutions	**Environment, Health & Safety** Has a focus on interrelationships of health, safety and environmental systems and the impacts of these systems on organizational performance for continuous improvement	**Global & Cultural Awareness** Has a focus on solutions and initiatives related to global issues and the benefits of working in diverse settings on diverse teams	**Information, Media and Technology** Has a focus on information and media literacy to improve productivity, solve problems and create opportunities	**Leadership** Has a focus on applying leadership skills in real-world, family, community and business and industry applications
12 Career Ready Practices**					
Attend to personal health and financial well-being	Apply appropriate academic and technical skills	Consider environmental, social and economic impacts of decisions	Work productively in teams while using cultural global competence	Employ valid and reliable research strategies	Act as a responsible and contributing citizen and employee
Plan education and career paths aligned to personal goals	Communicate clearly and effectively with reason			Use technology to enhance productivity	Model integrity, ethical leadership and effective management
	Demonstrate creativity and innovation				
	Utilize critical thinking to make sense of problems and preserve in solving them				

Structure & Organization of Wisconsin Standards

Let's Take a Closer Look:

- Main Sections & Organization
  - Business & Information Technology
  - Table of Contents Supplement

Paper Age versus Digital Age

- As you search for content, knowledge and skill statements utilize the Excel workbook (specifically the import tab using the find command) http://cte.dpi.wi.gov/cte_bitstandards

Structure of Programs & Standards

Page 58

P=Primary source/s=secondary source

	Wisconsin Common Career Technical Standards						Business Standards										Information Technology Standards			
Type of Course	Global Awareness	Life & Career Skills, Career Development, & Employability Skills	Information, Media & Technology	Sustainability, Environmental, & Safety	Leadership	Communication, Creativity, Collaboration, & Critical Thinking	Accounting & Finance	Business Calculations	Business Communication	Business Law & Ethics	Economics	Entrepreneurship	Global Business	Management	Marketing	Personal Finance	IT Foundations	Digital & Graphic Communications	Networking	Programming
Accounting	s	s	s		s	s	P	s		s	s		s	s	s	s	s			
Business Communication	s	s	s		s	s			P	s							s			
Business Law	s	s	s	s	s	s	s		s	P	s						s			
Business Math	s	s	s		s	s	s	P		s	s					P	s			
Computer Applications (elem, middle, high school levels)		s	s		s	s		s	P	s							P	s	s	
Computer Literacy (elem, middle, high school levels)		s	s		s	s		s		s							P	P	P	s
Desktop Publishing		s	s		s	s			P	s					s		P	P		
Digital/Software Devel.		s	s		s	s			s	s					s		s			P
Economics	s	s	s	s	s	s	s	s		s	P					s	s			

Standards Formatting

Page 61

Standards Formatting

Page 67

Performance Indicator by Grade Band: Measurable degree to which a standard has been developed and/or met

Discipline

Content Area

Standard: Broad statement that tells what students are expected to know or be able to do

Learning Priority: Breaks down the broad statement into manageable learning pieces

Business & Information Technology			
Content Area: BCA/Business Calculations			
Standard: BIT.BCA1: Analyze and use appropriate operations to solve business and personal mathematical problems.			
	Performance Indicators (By Grade Band)		
Learning Priority	K-5	6-8	9-12
BCA1.a: Perform financial calculations.	**BCA1.a.1.e:** Define terms related to financial statements.	**BCA1.a.3.m:** Calculate checkbook balance and bank reconciliation.	**BCA1.a.5.h:** Calculate gross or net sales, gross profit or loss, cost of inventory, operating expenses, net profit or loss, total assets, liabilities, owner's equity, and cash flow.
	BCA1.a.2.e: Identify various personal financial statements (i.e., budgets, etc.).	**BCA1.a.4.m:** Estimate mark down percentages and costs.	**BCA1.a.6.h:** Calculate and analyze sales computations (net sales, markup percentages, markdown percentages, sale prices, discounts).

Phase-by-Phase Roll Out

Phase 1 **2013-2014**	Phase 2 **2014-2015**	Phase 3 **2015-2016 and beyond**
• Engage a broad group of stakeholders in decisions around offerings and content of courses • Understand implications for increased rigor and content with the new Wisconsin Standards for CTE • Understand how the Wisconsin Common Career Technical Standards (WCCTS) fit into CTE coursework • Understand the shift required between the Model Academic Standards (1998) and the new Wisconsin Standards for CTE (2013) • Plan for curriculum development • Continue embedding Literacy for All Subjects and Mathematical Practices in current coursework, instruction, and assessment • Begin preliminary look at relevant industry certifications	• Work closely with other teachers and content areas to understand and embed key strategies and curriculum/standards into CTE courses • Develop local curriculum based on instructional focus to implement the Wisconsin Standards for CTE • Align and select resources to implement changes in instruction • Review and align local formative and benchmark assessments to Wisconsin Standards for CTE • Review and update current equivalency options in CTE • Investigate industry certifications and assessments relevant to local curriculum and outcomes	• Develop new equivalency options in CTE • Expand transcripted and other post-secondary credit options based on Wisconsin Standards for CTE • Implement industry certifications and other assessments relevant to local curriculum and outcomes • Conduct collaborative team studies of student data and progress

Recent Announcements

- Personal Financial Literacy Study (DFI/DPI)
  - http://finance.dpi.wi.gov/
    - Findings:
      - 44% of Wisconsin school districts require a course in Personal Financial Literacy (PFL)
      - In districts with a required course, 89% have aligned their PFL course to Wisconsin's
      - Model Academic Standards for Personal Financial Literacy
      - 60% of school districts report offering PFL content at grade levels other than high school

Recent Announcements

- National Science Foundation Grant Award to Wisconsin
  - Marquette
  - UW-Lacrosse
    - Goals:
      - Professional Development for integrating concepts into cross-curricular classroom opportunities
      - Train staff to implement the national Exploring Computer Science Curriculum
      - Prepare teachers to deliver the pilot AP Computer Science Principles (approx. 1/7 Programming)

Recent Announcements

- Next week business & marketing state leaders and educators from 6 states will be attending a national forum. (CO, MO, NC, NV, WI, WV)
- Please take a few minutes to complete the following survey prior to the end of today: http://bit.ly/wibmitsurvey

Stay Connected

- BIT Website & Listserv
- WI FBLA (Facebook, Twitter)
- CTE Standards
  http://cte.dpi.wi.gov/cte_standards
- CTE Calendar
- CTE Data Resources
  - http://cte.dpi.wi.gov/cte_dataresources
- CTE Advocacy
  - http://cte.dpi.wi.gov/cte_cteadvocacy
- CTE Branding
  - http://cte.dpi.wi.gov/cte_brand
- Like Wisconsin Career & Technical Education Facebook

More Information Today:

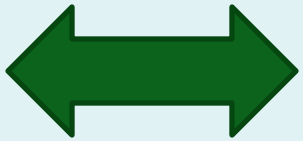
Connecting Business & Information Technology to Student Success in English Language Arts and Mathematics

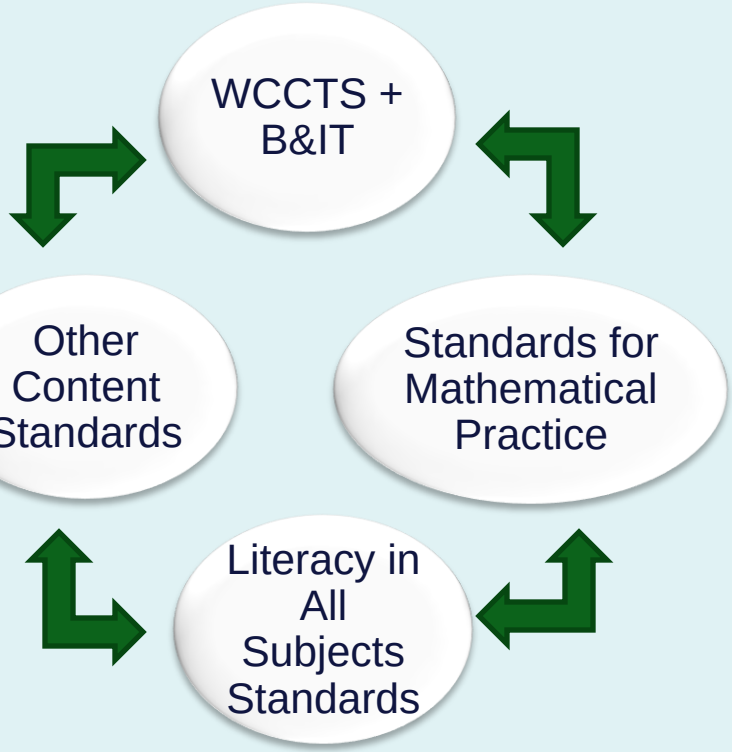
1:15-2:00

Room IV

Connecting CTE and CCSS

College and Career Ready Students





Career and Technical Education State Standards

Look for additional professional development opportunities online at **http://bit.dpi.wi.gov/bit_pd**

2014 Spring Updates at Technical Colleges

February 7	**Fox Valley**
February 11	**Madison**
February 12	**Milwaukee**
February 24	**Wisconsin Indianhead**
February 25	**Western Technical**
February 26	**NorthCentral**

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